

**C-A OSH
OPERATIONAL CONTROLS FORM**

Operational Controls Form for Occupational Safety and Health Hazards for C-AD Operations and Maintenance Activities	Completed By: <u>E. Lessard</u> Date: <u>May 22, 2006</u>		
1. Operations: Accelerator and Collider Operations, Testing, Maintenance and Emergency Response, Experiment Construction			
2. Activities: <table style="width: 100%; border: none;"> <tr> <td style="vertical-align: top; width: 50%;"> <ul style="list-style-type: none"> Particle Acceleration and Transport System Maintenance System Upgrades Emergencies </td> <td style="vertical-align: top; width: 50%;"> <ul style="list-style-type: none"> Experiment set up and operations Experimental Equipment Development and Test Material Handling Equipment Fabrication </td> </tr> </table>		<ul style="list-style-type: none"> Particle Acceleration and Transport System Maintenance System Upgrades Emergencies 	<ul style="list-style-type: none"> Experiment set up and operations Experimental Equipment Development and Test Material Handling Equipment Fabrication
<ul style="list-style-type: none"> Particle Acceleration and Transport System Maintenance System Upgrades Emergencies 	<ul style="list-style-type: none"> Experiment set up and operations Experimental Equipment Development and Test Material Handling Equipment Fabrication 		
3. Controls - Accelerators, Access, Operational, Safety Engineering and Personal Protective Equipment, Emergency Response: <p>All controls at the C-A complex are under a Formal Conduct of Operations (CO) and are described in detail in the C-A Operational Procedures (OPM).</p> <ul style="list-style-type: none"> Accelerator Controls: OPM Chapter 5 - Linac, Booster, AGS and RHIC Startup; OPM Chapter 8 - Subsystems, Rad- Storage,-Chipmunks,-Fencing, Experimental Areas, Water, Waste; CO Chapter 9 -Lockouts and Tagouts Access Controls: OPM Chapter 4 - Access Control System Testing, Sweep and Reset Requirements Operational Controls: OPM Chapter 2 - Conduct of Operations, Control Room Activities, LOTO, Maintenance, Work Planning Safety Engineering and Personnel Protective Equipment: OPM Chapter 9 and BNL Handbook on Personal Protective Equipment (PPE) Selection and Use - Radiation Safety, ESH Committees, ESH Review, ALARA, Safety Inspection, Cryogenic Safety Emergency Response Controls: OPM Chapter 3, Emergency Procedures Experiment Operations Controls: OPM Chapter 11 – Experimental Procedures 			
4. Maintenance Plan(s): <ul style="list-style-type: none"> C-AD OPM 			

5. Actions to be Taken if Control Fail: <ul style="list-style-type: none"> • CO Chapter 4 - Communications • CO Chapter 6 - Investigation of Abnormal Occurrences • OPM Chapter 3 - Emergency Procedures • OPM Chapter 10 – Occurrence Reporting 		
6. Records: <ul style="list-style-type: none"> • CO Chapter 10 - Independent Verification • CO Chapter 11 - Logkeeping • OPM Chapter 13 - Quality Assurance • Job Risk Assessments and Facility and Area Risk Assessments 		
7. Responsibilities: (a) to ensure controls are in place; (b) to ensure controls keep working; (c) to take action when controls fail; (d) to create and keep records relative to operational controls <ul style="list-style-type: none"> • R2A2s • OPM Chapter 1 - Policies for Authorization, Training, Environment, Safety, Procedures, Minors, Visitors • CO Chapter 1 - Organization and Administration 		
Name		Responsibility
Responsible and authorized personnel are listed and maintained in the C-A Operational Procedures Manual		OPM 1.1 - Authorization OPM 1.11 - Department Requirements for Interaction with C-A OPM 10.1 - Occurrence Reporting and Processing of Operations Information
8. Training:		
Name	Training	Training Policy
Training data is maintained in BTMS	See specific Job Training Assessments (JTAs) in BTMS	OPM 1.12 – Training and Qualification Plan OPM 1.12.b - Instructors Qualified By Department Position or Authority OPM 1.12.c - C-A Facility-Specific Briefing Form for Unescorted Contractors